

Appendix B

Biological Evaluation



LIVE OAK ASSOCIATES, INC.

an Ecological Consulting Firm

MONTEREY S. OF WATSONVILLE BIOLOGICAL EVALUATION SANTA CLARA COUNTY, CALIFORNIA

Prepared by

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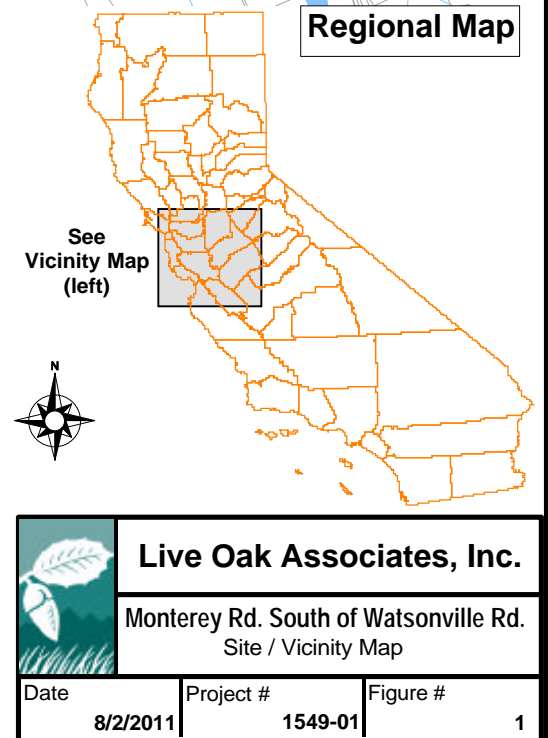
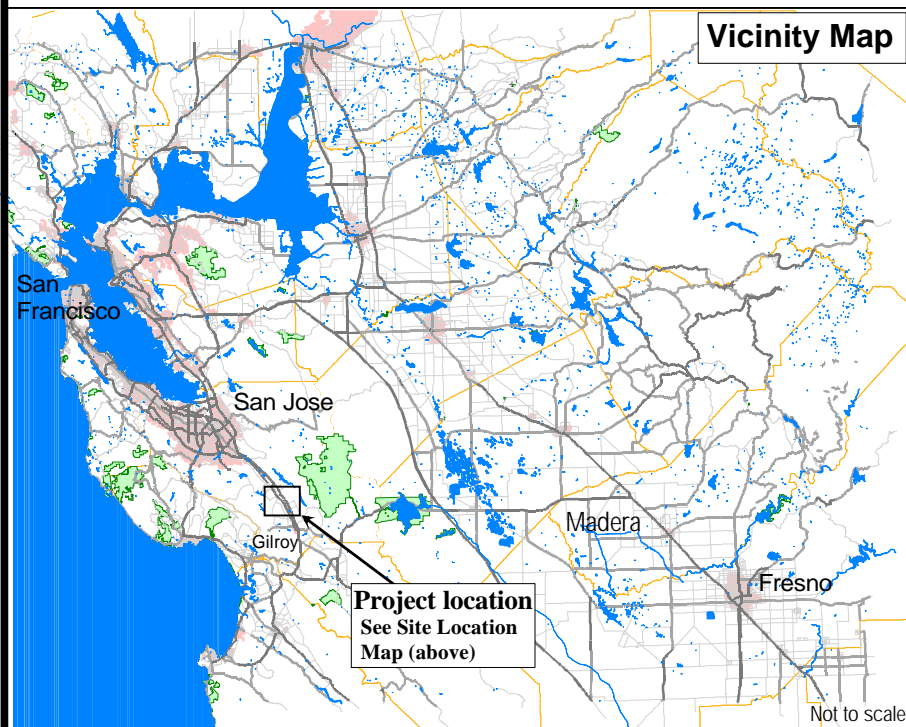
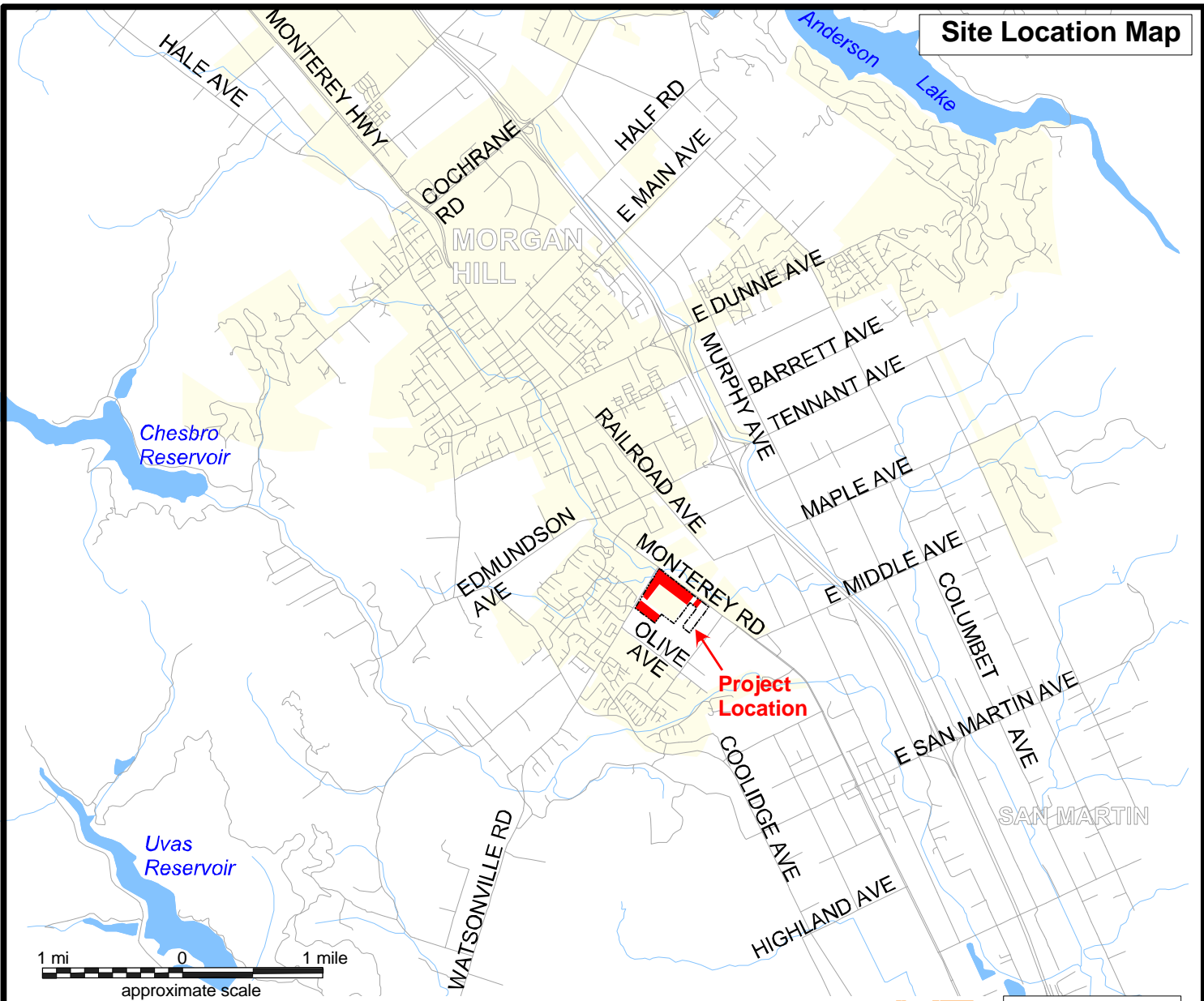
1.0 INTRODUCTION

Live Oak Associates, Inc. (LOA), has prepared the following report, which describes the biotic resources of the approximately 31.14 acres of the approximately 42.8-acre Monterey S. of Watsonville project area located on Watsonville Road and Monterey Road, outside of the Urban Service Area (USA) of the City of Morgan Hill (City) in Santa Clara County, California. This report evaluates potential impacts to these resources resulting from a proposed USA expansion and a series of General Plan Amendments (GPAs), annexations, rezoning, and prezonings (Section 1.1). The project site is located in the Mount Madonna 7.5" U.S. Geological Survey (USGS) quadrangle in the Historic Rancho or Land Grant called "San Francisco De Las Llagas," which when superimposed into the Public Land Survey System falls within the southwest 1/4 section 34, township 9 south, range 3 east.

The biological evaluation was conducted for the following ten (10) assessor parcel numbers (APNs): 779-04-001, 779-04-003, 779-04-004, 779-04-005, 779-04-010, 779-04-030, 779-04-052, 779-04-056, 779-04-072, and 779-04-074. Seven (7) additional APNs are included in the greater Monterey S. of Watsonville project area. Therefore, these ten (10) parcels, subject to biological evaluation, are referred to collectively as the "study area" or "study site." The greater Monterey S. of Watsonville project area, inclusive of seventeen (17) APNs, is referred to as the "project area."

While the various projects of annexations, rezoning, and prezonings would not affect biotic habitats or species, future site development of individual parcels related to the Monterey S. of Watsonville project can damage or modify biotic habitats used by sensitive plant and wildlife species. In such cases, these projects may be regulated by state or federal agencies, subject to provisions of the California Environmental Quality Act (CEQA), and/or covered by policies and ordinances of the City of Morgan Hill. This report addresses issues related to: 1) sensitive biotic resources occurring on the site; 2) the federal, state, and local laws regulating such resources, and 3) mitigation measures which may be required based on potential impacts. As such, the objectives of this report are to:

- Summarize all site-specific information related to existing biological resources;



- Make reasonable inferences about the biological resources that could occur onsite based on habitat suitability and the proximity of the site to a species' known range;
- Summarize all state and federal natural resource protection laws that may be relevant to possible future site development;
- Identify and discuss project impacts to biological resources likely to occur on the site within the context of CEQA or any state or federal laws; and
- Identify avoidance and mitigation measures that would reduce impacts to a less-than-significant level as identified by CEQA and that are generally consistent with recommendations of the resource agencies for affected biological resources.

The analysis of impacts, as discussed in Section 3.0 of this report, is based on the known and potential biotic resources of the site, discussed in Section 2.0. Sources of information used in the preparation of this analysis included: 1) the *California Natural Diversity Data Base* (CDFG 2011), 2) the *Inventory of Rare and Endangered Vascular Plants of California* (CNPS 2011), and 3) manuals and references related to plants and animals of Santa Clara County. Reconnaissance-level field surveys of the study area were conducted on July 6 and 13, 2011 (pertaining to access within separate parcels) by LOA ecologists Nathan Hale and Katrina Huck, at which time the principal biotic habitats and land uses of the various parcels were identified, and the constituent plants and animals of each were noted. A protocol-level burrowing owl survey of the parcels was also conducted by LOA ecologists, Melissa Denena, Mr. Hale, and Ms. Huck on July 6, 7, 11, 13, 14, 20 and 22, 2011, the dates of which correspond to staggered 4-day surveys for each parcel of the study areas containing suitable burrowing owl habitat. APN 779-04-030 was surveyed from the margins of the parcel as a result of not obtaining permission to access.

Focused surveys for sensitive plant and animal species, aside from the burrowing owl, were not conducted as part of this study. The level of investigation was sufficient to locate and establish the general extent of potentially suitable habitat present for such species and the presence or absence of burrowing owls within the study area, but it was not sufficient to establish the presence or absence of other special status species unless it was incidentally sighted during the general survey.

1.1 PROJECT DESCRIPTION

The proposed project includes the amendment of the USA, including expansion and a series of GPAs, annexations, rezoning, and prezonings of the 42.8-acre Monterey S. of Watsonville project area. The project area has been divided into three parcel groupings consisting of various uses, including mushroom production facility, Oakwood Country School, Santa Clara Valley Water District property, Morgan Hill Bible Church, single-family residences, and commercial uses. The parcel groupings are described below as the Watsonville-Royal Oaks site, the Monterey-City of Morgan Hill site, and the Monterey-Morgan Hill Bible Church site. As suggested earlier, only ten (10) of the seventeen (17) parcels of the project site that are discussed below in this project description have been subject to a biological evaluation for inclusion in this report. APNs denoted with an asterisk were included in the biological surveys and analysis for this report. APNs without an asterisk in this project description were not included in the biological analysis.

Watsonville-Royal Oaks Site

The Watsonville-Royal Oaks site includes six parcels totaling approximately 17.34 acres, all of which are currently outside of the City limits. Portions of this site include a mushroom processing facility and land owned by the Santa Clara Valley Water District. Land use designation changes are proposed on four of the parcels (779-04-001*, 779-04-003*, 779-04-004*, and 779-04-056*) from *Single Family Medium (SFM)* to *Light Commercial-Residential*, with prezoneing to *Light Commercial-Residential (CL-R)* from County *Agriculture (A-20Ac)*. On one of the parcels (779-04-052*), a GPA from *Single Family Medium (SFM)* to *Multi-Family Medium (MFM)*, and prezoneing to *Multi-Family Medium (MFM)/Planned Development (PD)* from *Agriculture (A-20Ac)* is proposed to allow for future development of a Senior Assisted Living Facility. This parcel is mapped as Prime Farmland by the California Department of Conservation. The remaining parcel (779-04-067) is Santa Clara Valley Water District property adjacent to West Little Llagas Creek and will remain *Open Space* under the GP designation and prezoneing. Anticipated development on the 17.34 acre site would include 100 multi-family units, 180 senior units, and 6,000 square feet of retail space.

Monterey-City of Morgan Hill Site

The second project site includes nine parcels totaling 15.98 acres, seven of which are located within the city limits. The site is currently developed with the private Oakwood Country School and single family residences. There is no new development currently proposed for the site; however, the existing school has expansion potential for up to 776 students under a Use Permit issued by the City in 2004. The Oakwood Country School needs no additional discretionary actions from the City to expand and so is not subject to environmental review at this time.

On six of the parcels (779-04-005*, 779-04-030*, 779-04-032, 779-04-033, 779-04-074*, and 779-04-072*) a general plan change is proposed from *Single Family Medium (SFM)* to *Light Commercial-Residential*, and rezoning to *Light Commercial-Residential (CL-R)* from *RE (100,000)*. On two of the parcels (779-04-010* and 779-04-015) a GPA from *Single Family Low (SFL)* to *Light Commercial-Residential* and a prezoning and annexation to *Light Commercial-Residential (CL-R)* from *County Agriculture (A-20Ac)* is proposed. The private Oakwood Country School is located on the remaining parcel (779-04-073). The City of Morgan Hill GP designation (*Single Family Medium (SFM)*) will remain the same on the school site, but a zoning change from *RE(100,000)* to *Single Family District R1(9,000)* is proposed. The purpose of rezoning the school site is to have the zoning district in conformance with the General Plan land use designation for the site, but it will not authorize any additional development that can't already occur under the current zoning and Use Permit, and therefore, there are no direct or reasonably foreseeable indirect impacts expected from the rezoning.

Monterey-Morgan Hill Bible Church Site

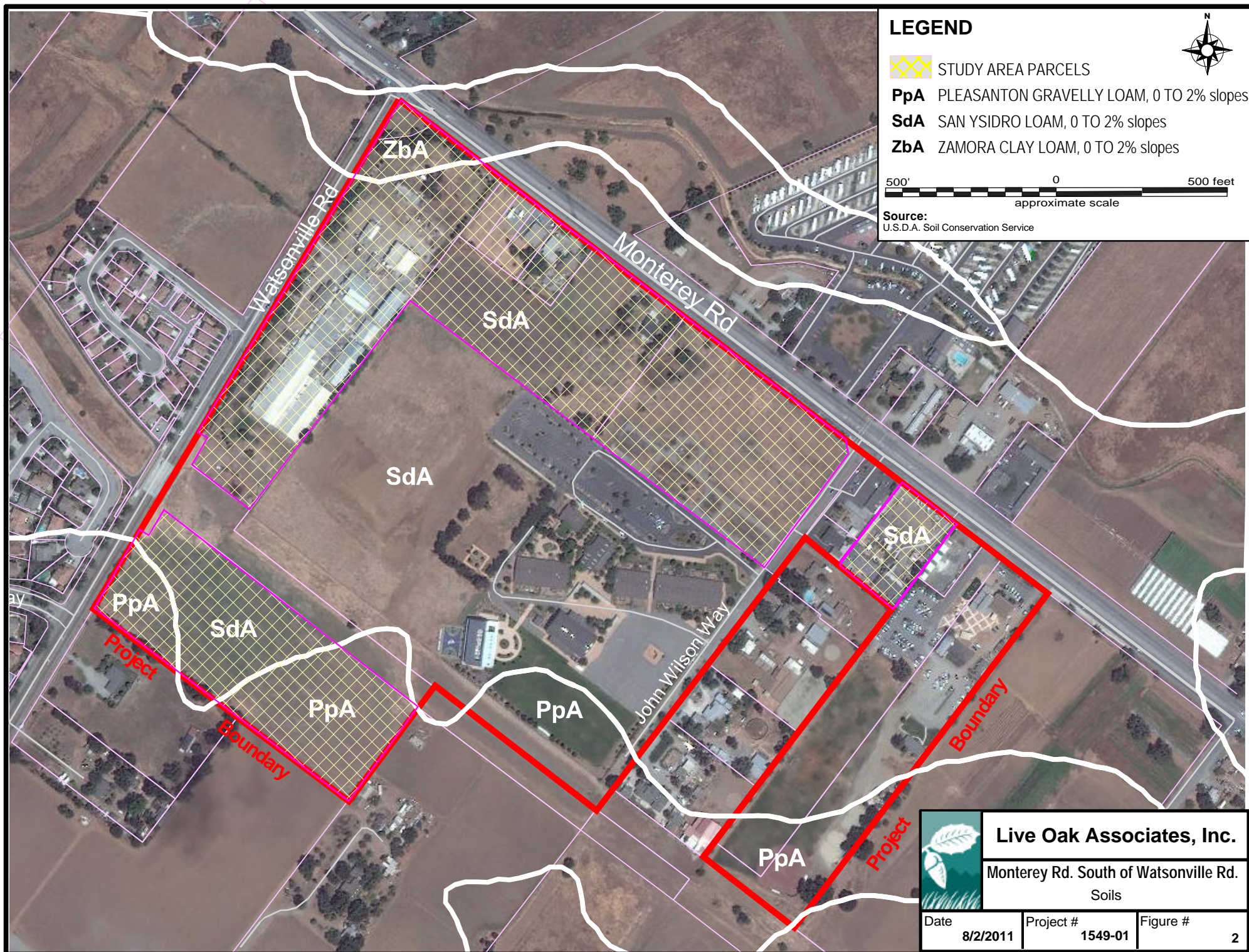
The Monterey-Morgan Hill Bible Church project site includes two parcels totaling 9.48 acres occurring outside of the city limits. The site is currently developed with the Morgan Hill Bible Church and school facility. Annexation of both of the parcels (779-04-016 and 779-04-061) is proposed. The project also includes a GPA from *Single Family Low (SFL)* to *Public Facility (PF)*, and prezoning to *Public Facility (PF)* from *County Agriculture (A-20Ac)*. Anticipated future development would include redeveloping the existing 11,600 square foot church and classrooms with approximately 20,000 square feet of the same use.

2.0 EXISTING CONDITIONS

The study area is located in the Morgan Hill and surrounding unincorporated lands of Santa Clara County, California. The biological study area is comprised of three contiguous areas near one another within the Monterey S. of Watsonville project area. One of these areas (inclusive of APNs 779-04-001, 779-04-003, 779-04-004, 779-04-005, 779-04-030, 779-04-056, 779-04-072, and 779-04-074) is bordered by Watsonville Road to the northwest, Monterey Road to the northeast, undeveloped Santa Clara Valley Water District land and Oakwood Country School lands, including a parking area and undeveloped field to the southwest, and John Wilson Way to the southeast. To the southwest of this area another portion of the study area that is the total of APN 779-04-052, an undeveloped fallow agricultural field, is bordered by Watsonville Road to the northwest, undeveloped Santa Clara Valley Water District land to the northeast, and agricultural fields and residential development to the southeast and southwest. The final area, comprised of the total of APN 779-04-010, is bordered Monterey Road to the northeast, a nursery and the parking area of Morgan Hill Bible Church to the southeast, and residential development to the southwest.

Surrounding lands primarily consist of undeveloped agricultural fields, open space, and residential and industrial development. The study area itself consists of a mushroom production facility, residential and commercial buildings including paved and gravel parking areas, fallow agricultural lands, undeveloped ruderal fields, and the riparian corridor and seasonal channel of West Little Llagas Creek. Topographically, the study area is relatively flat, ranging in elevations from 312 ft. (95 m) to 325 ft. (99 m) National Geodetic Vertical Datum (NGVD).

Three soil types from three soil series—Pleasanton, San Ysidro, and Zamora—were identified on the project site (Fig. 2; NRCS 2010). Of the three soils types, San Ysidro soils are considered hydric. Hydric soils are soils that are saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper part. Under sufficiently wet conditions, they support the growth and regeneration of hydrophytic vegetation. The other soil types are not considered hydric, although hydric inclusions may occur. None of the soil series is



considered to be strongly alkaline in nature, which would preclude certain sensitive plant species from successfully maintaining populations on the site. Serpentine soils are absent from the site, indicating that plants adapted to such soils are unlikely to have colonized the site in the past or under current conditions.

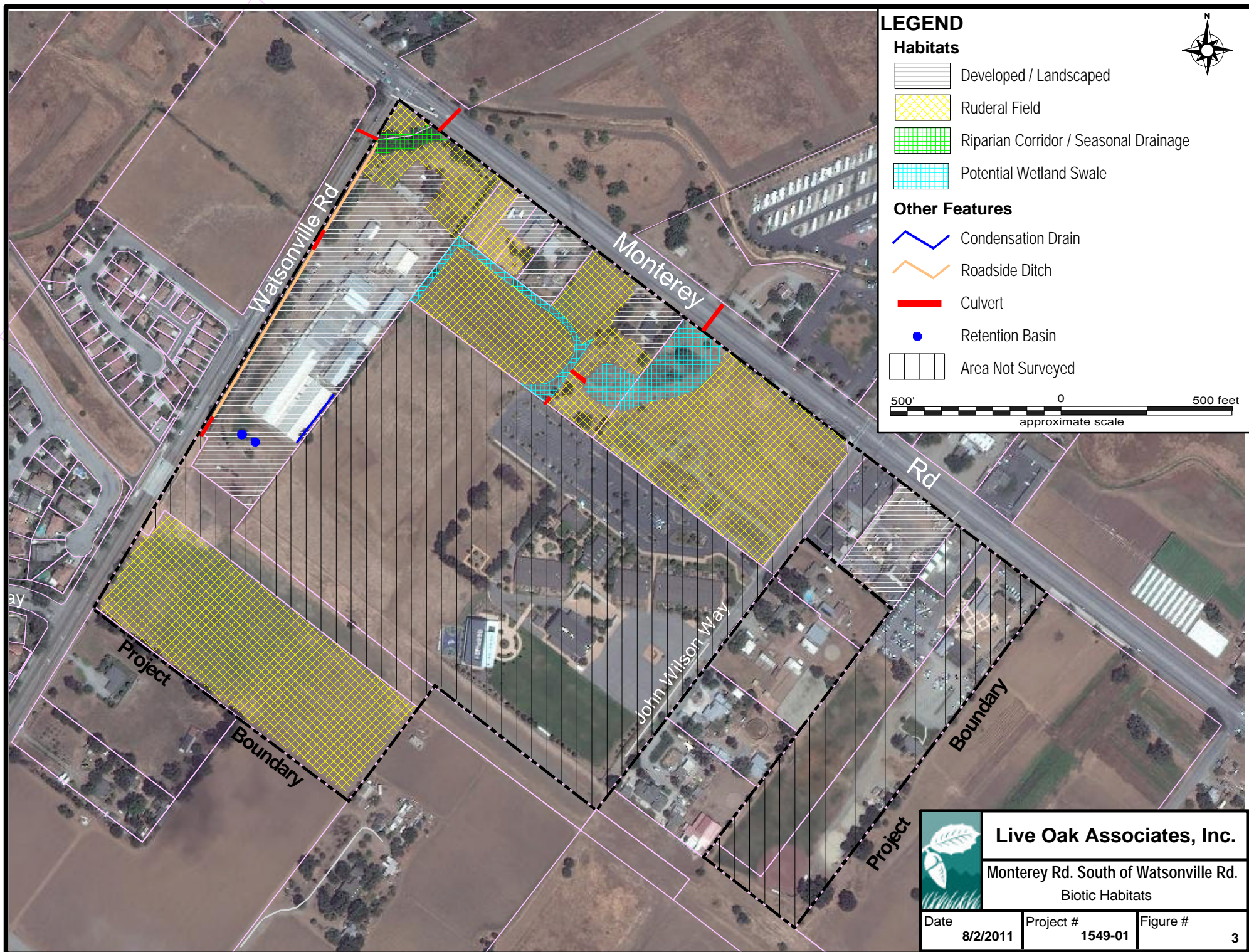
Table 1. Soils occurring within the Monterey S. of Watsonville project site (NRCS 2010).

Soil Series/Soil	Map Symbol	Parent Material/Noteable Characteristics	Surface Permeability	Hardpan/Duripan	Hydric (compostion)
PLEASANTON, Pleasanton gravelly loam, 0 to 2% slopes	PpA	Alluvium weathered from sedimentary rocks. Well drained	Slow to Moderate	No	No
SAN YSIDRO San Ysidro loam, 0 to 2% slopes	SdA	Alluvium from sedimentary rocks. Moderately well drained. Slight to medium acidity.	Very slow	No	Yes (5%)
ZAMORA SERIES Zamora clay loam, 0 to 2% slopes	ZbA	Alluvium from sedimentary rocks. Well drained. Slightly alkaline to neutral.	Moderately slow	No	No

Annual precipitation in the general vicinity of the study area averages 22 inches, almost 95% of which falls between November and April. Virtually all precipitation falls in the form of rain. Stormwater runoff readily infiltrates the soils of the site, but when field capacity has been reached, gravitational water either flows into a road-side ditch along the northwest boundary of the site or a potential wetland swale which connects to an unnamed offsite drainage to the north of the site, both of which eventually empties into an offsite reach of West Little Llagas Creek. Also, some of the gravitational water of the site may flow into a Santa Clara Valley Water District basin near the southern project site boundary or directly into the onsite portion of West Little Llagas Creek, which crosses the northern-most corner of the study area.

2.1 BIOTIC HABITATS / LAND USES

The study area supports three natural biotic habitats as well as developed/landscaped areas that provide some biological habitat value for certain species. For the purposes of this report, the biotic habitats of the site are listed as, “Ruderal Field,” “Developed/Landscaped,” “Riparian Woodland and Seasonal Drainage,” and “Potential Wetland Swale.” Within the Developed/Landscaped land use area several created wet features, including created basins to retain stormwater collected from the mushroom production buildings, a drain running along



Live Oak Associates, Inc.

Monterey Rd. South of Watsonville Rd.
Biotic Habitats

Date

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Project #

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Figure #

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the back of one of the large buildings that dissipates condensation water, and a roadside ditch that carries local stormwater into West Little Llagas Creek, were observed. These will be discussed in greater detail below. A list of the vascular plant species observed on the site is provided in Appendix A.

2.1.1 Ruderal Field

Large portions of the study area are comprised of ruderal fields which consist of fallow agricultural fields, empty lots, and marginal areas between developed land uses. These habitats may experience occasional disturbances in the forms of discing and mowing. A 4-foot diameter area of solid cattail (*Typha latifolia*) was observed within the ruderal field of APN 779-04-074 along the sidewalk that is adjacent to Monterey Road. It appears that the area where the cattails are growing is as a result of a broken water pipe nearby. Other than supporting a mono-typic stand of cattail, this feature does not constitute an important or unique ecological feature, such as through surface inundation.

Ruderal portions of the study area were dominated by non-native grasses and forbs and also contained a few scattered trees and shrubs. Grasses occurring in this habitat were primarily of European descent and included slender wild oats (*Avena barbata*), ripgut brome (*Bromus diandrus*), Italian ryegrass (*Lolium multiflorum*), foxtail barley (*Hordeum murinum*), and Mediterranean barley (*Hordeum marinum* ssp. *gussoneanum*). Dominant forbs observed include field mustard (*Brassica rapa*), lambsquarters (*Chenopodium* sp.), field bindweed (*Convolvulus arvensis*), and prickly lettuce (*Lactuca serriola*). Other forbs observed include teasel (*Dipsacus fullonum*), wild radish (*Raphanus sativus*), redstem filaree (*Erodium cicutarium*), panicked willowherb (*Epilobium brachycarpum*), common knotweed (*Polygonum arenastrum*), curly dock (*Rumex crispus*), salsify (*Tragopogon* sp.), and puncture vine (*Tribulus terrestris*), to name a few. Trees and shrubs observed in these areas include, but were not limited to, coyote brush (*Baccharis pilularis*), mule fat (*Baccharis salicifolia*), coast live oak (*Quercus agrifolia*), blue gum (*Eucalyptus globulus*), California black walnut (*Juglans californica*), and several planted redwoods (*Sequoia sempervirens*).

Only one reptilian species, the western fence lizard (*Sceloporus occidentalis*), was observed within this habitat type during the July 2011 surveys. No amphibian species were observed during these surveys. Several additional reptilian and amphibian species would reasonably be expected to occur within this habitat type of the study area including, but not limited to, the Pacific treefrog (*Hyla regilla*), western toad (*Bufo boreas*), California alligator lizard (*Elgaria multicarinatus*), gopher snake (*Pituophis melanoleucus*), and western rattlesnake (*Crotalus viridis*), which may forage in grassland-like open habitats for invertebrates and/or small mammals.

Avian species observed in these areas include the red-tailed hawk (*Buteo jamaicensis*), killdeer (*Charadrius vociferus*), Eurasian collared dove (*Streptopelia decaocto*), mourning dove (*Zenaida macroura*), American crow (*Corvus brachyrhynchos*), western scrub-jay (*Aphelocoma californica*), black phoebe (*Sayornis nigricans*), California towhee (*Melospiza crissalis*), American robin (*Turdus migratorius*), and house finch (*Carpodacus mexicanus*). These and other bird species would be expected to utilize the ruderal fields of the study area for foraging habitat, cover, and limited breeding habitat. Trees and shrubs of the site provide nesting habitat for migratory birds including the tree swallow (*Tachycineta bicolor*), Say's phoebe (*Sayornis saya*), northern mockingbird (*Mimus polyglottos*), rock dove (*Columba livia*), Anna's hummingbird (*Calypte anna*), to name a few. The larger trees provide nesting habitat for numerous birds including raptors such as the red-tailed hawk, American kestrel (*Falco sparverius*), and red-shouldered hawk (*Buteo lineatus*).

Mammalian species may also utilize this study area, though in a limited way relative to natural habitats; management would have limited the establishment of significant populations of fossorial species. Mammals observed in this habitat of the site included the California ground squirrel (*Otospermophilus beecheyi*), black-tailed jackrabbit (*Lepus californicus*), and feral cat (*Felis catus*). Other species likely to occur include the Virginia opossum (*Didelphis virginiana*), Botta's pocket gopher (*Thomomys bottae*), California vole (*Microtus californicus*), brush rabbit (*Sylvilagus bachmani*), ornate shrew (*Sorex ornatus*), and striped skunk (*Mephitis mephitis*). Predators that may be attracted to small mammals and invertebrates of the ruderal fields include the raccoon (*Procyon lotor*), coyote (*Canis latrans*), non-native red fox (*Vulpes vulpes*), and

black-tailed deer (*Odocoileus hemionus columbianus*). Some of these species, as well as other species not listed, would be expected to travel to these habitats by way of West Little Llagas Creek corridor in the course of migratory or foraging movements. The duration of site occurrence would be limited for most of these species by habitat unsuitability.

2.1.2 Developed/Landscaped

Several portions of the study area are comprised of developed and landscaped areas, including the aforementioned mushroom production facility, a few residential buildings, a building supporting bail-bond and hardware businesses, and a masonry company. The mushroom facility (APN 779-04-056), which is a more complex developed setting than the others, is comprised of several large mushroom production buildings, storage buildings, a workshop, a retail office, and a couple large open-air, covered storage structures as well as various out-structures. This facility also includes a small garden area, a gravel driveway and parking area, a large pile of spent compost, two small excavated basins that retain onsite stormwater from the facility, and a small condensation-fed bare-earth drain feature that has formed along the southeast side of one of the large buildings of the facility. Also, a roadside ditch occurs along the margin of the parcel which carries stormwater from along the shoulder of Watsonville Road in a northeasterly direction toward its convergence with West Little Llagas Creek. The other developed areas (APN 779-04-005, 779-04-010, and 779-04-030, and a portion of 779-04-072) contain structures including minimal paved parking areas, shed structures, single-family residential units, and small business buildings. APN 779-04-030 also contains a small barn structure.

Landscaped vegetation observed within these portions of the study area was characterized as a combination of typical landscaping elements and rural habitat elements supporting species identical to those observed in the ruderal field habitats (Section 2.1.1). Landscape species observed include large to small trees, including but not limited to, blue gum, crape myrtle (*Lagerstroemia indica*), Monterey pine (*Pinus radiata*), coast redwood, and various species of crop trees including citrus (*Citrus* spp.), olive (*Olea europaea*), and plum (*Prunus* sp.), to name a few. Ornamental shrubs observed within the various developed areas include but are not limited to century plant (*Agave americana*), oleander (*Nerium oleander*), beavertail cactus (*Opuntia* sp.),

and bottlebrush (*Callistemon citrinus*). Aside from planted lawn areas and a patch of periwinkle (*Vinca major*), ground cover species observed in these areas are species found in the ruderal field habitats that have likely colonized or persisted within the developed areas.

Developed lands provide limited habitat for locally occurring wildlife species; however, the rural nature of the developed lands within the study area provide some level of continuity between more natural habitats. Ongoing disturbances occurring on developed lands would reduce the value of the foraging habitat for wildlife and would preclude some of the species that would occur on the more natural areas in the vicinity of these developed areas from utilizing these areas for breeding habitat.

Amphibian and reptilian species that may utilize the developed lands incidentally for forage and cover include amphibians such as the California slender salamander (*Batrachoseps attenuatus*), Pacific tree frog, western toad, bull frog (*Rana catesbeiana*), western fence lizard, California alligator lizard and gopher snake. Low-quality breeding habitat for amphibians may be present within the retention basins occurring within the mushroom production facility depending upon annual conditions and water quality of the pump-fed basins. Both basins were dry at the time of the July 2011 surveys.

Avian species that may occur within the developed areas of this habitat are not significantly differentiated from those species which occur in the ruderal field habitats of the study area (Section 2.1.3), as indicated by the species observed within each of these habitat types during the July 2011 surveys. Foraging habitat is more limited for many species of birds relative to more natural areas. Some urban-adapted bird species, such as the mourning dove, cliff swallow (*Petrochelidon pyrrhonota*), black phoebe, European starling (*Sturnus vulgaris*), house finch, and house sparrow (*Passer domesticus*), may occasion to nest on the development structures of the site, and suitable nesting habitat is present in the trees and shrubs of the site for numerous other species including the red-tailed hawk, American kestrel, American crow, American robin, and Say's phoebe, to name a few.

A few mammals could be expected to occur on a regular basis within the developed areas of the study area. These include residential pets as well as the California ground squirrel, which was observed on several of the parcels during the July 2011 surveys, Botta's pocket gopher, California mouse (*Peromyscus californicus*), brush rabbit, black-tailed jackrabbit, striped skunk, northern raccoon, eastern fox squirrels (*Sciurus nigra*), and Virginia opossum. These species would predominantly be expected to forage in the developed areas of the site; however, the California ground squirrel, Botta's pocket gopher, California mouse, and eastern fox squirrel possibly maintain breeding populations within these areas.

2.1.3 Riparian Woodland and Seasonal Drainage

An approximately 200-foot reach of the seasonal drainage, West Little Llagas Creek, which flows west to east across the northern corner of the site, provides for a fairly dense riparian habitat for local wildlife. The creek enters the site from under Watsonville Road through a culvert and flows off of the site through another culvert beneath Monterey Road. Due to its proximity to developed areas, the creek has been somewhat degraded from unnatural siltation, non-native species establishment, litter buildup, and lack of native species occurrence or establishment (e.g. seed flow) along and within the creek. At the time of the July 2011 surveys, the creek was not flowing, though shallow, stagnant puddled areas were present.

The bed of the creek was sparsely vegetated at the time of the July 2011 surveys, apparently due to heavy siltation, scouring, shading from the extensive tree canopy, and/or inundation. The banks of the creek, however, provided for a densely vegetated coast live oak riparian woodland. Trees associated with the riparian canopy included coast live oak, valley oak (*Quercus lobata*), walnut, and olive. Understory vegetation along the bed and banks included sparse unidentified grasses, as well as Harding grass (*Phalaris aquatic*), Italian thistle (*Carduus pycnocephalus*), teasle, English plantain (*Plantago lanceolata*), tall cyperus (*Cyperus eragrostis*), and curly dock (*Rumex crispus*).

The seasonal drainage, of West Little Llagas Creek, provides movement and foraging habitat for several species of fish including the Sacramento sucker (*Catostomus occidentalis occidentalis*),

sacramento pikeminnow (*Ptychocheilus grandis*), and mosquitofish (*Gambusia affinis*). This drainage also provides a seasonal source of drinking water and cover for species occurring in the surrounding habitats and may also provide breeding habitat for amphibians and reptiles such as pacific treefrogs, western toads, and garter snakes (*Thamnophis* sp.); however, the reach of the creek occurring on the study area does not appear to provide pooling usually required for amphibian breeding habitat. A western fence lizard was observed on the bank of the creek during the July 2011 surveys.

Numerous birds would occur within this habitat including those observed in other habitats of the study area. An unoccupied stick nest was observed in a coast live oak on the south side of the corridor, and individual black phoebes and chestnut-backed chickadees (*Poecile rufescens*) were observed in the riparian woodland habitat. While the riparian habitat is quite dense, it would be slightly less desirable for native species relative to riparian habitat occurring further from urban development, due to the presence of the busy roadways of Monterey and Watsonville Roads and impacts from upstream inputs.

Prints of mammalian species were observed in the creek bed including those of the raccoon, cat, and dog. Other mammalian species may utilize the riparian corridor and channel of the site for forage and migration activities such as coyote, raccoons, and black-tailed deer. The mountain lion (*Puma concolor*) may also traverse through this portion of the study area from time to time.

2.1.4 Potential Wetland Swale

A potential wetland swale feature was observed on APNs 779-04-072 and 779-04-074 (Figure 3). The feature partially circumvents an area of raised soils to the southeast of the mushroom production facility, where it was identified by its dense hydrophytic vegetation. The feature appears to flow to the southeast through a culvert and into a wider area of more sparse hydrophytic and ruderal vegetation before flowing toward Monterey Road where it crosses through another culvert and drains toward an offsite stretch of West Little Llagas Creek. At the time of the July 2011 surveys this feature was dry. Therefore it is not clear to what extent this feature collects water through the year, or its exact size and boundary. In general, though, this

feature is fairly degraded, apparently subject to soil management related to agricultural uses and/or vegetation management.

The northwest portion of this feature (separated by the culvert) is comprised of dense populations of a few hydrophytic plant species including rabbitsfoot grass (*Polypogon monspeliensis*), curly dock, and Italian ryegrass. Southeast of the culvert, the feature supports additional species such as narrow-leaf milkweed (*Asclepias fascicularis*), sedge (*Carex* sp.), tall cyperus (*Cyperus eragrostis*), teasel, sedge (*Eleocharis* sp.), seaside heliotrope (*Heliotropium curassavicum*), cocklebur (*Xanthium strumarium*), and spiny cocklebur (*Xanthium spinosum*). The southeast portion of the feature also supports a few scattered trees including include valley and coast live oaks.

Wildlife species expected to occur in the surrounding habitats could be expected to occasionally forage and/or pass through this feature from time to time. During periods of high precipitation, when the feature is likely to contain some shallow standing water, amphibian species that could occur in the West Little Llagas Creek and retention basins, such as the Pacific treefrog, western toad, and bull frog, may utilize this feature more extensively.

2.2 MOVEMENT CORRIDORS

Many terrestrial animals need more than one biotic habitat in order to perform all of their biological activities. With increasing encroachment of humans on wildlife habitats, it has become important to establish and maintain linkages, or movement corridors, for animals to be able to access locations containing different biotic resources that are essential to maintaining their life cycles. Terrestrial animals use ridges, canyons, riparian areas, and open spaces to travel between their required habitats.

The importance of an area as a movement corridor depends on the species in question and its consistent use patterns. Animal movements generally can be divided into three major behavioral categories:

- Movements within a home range or territory;
- Movements during migration; and
- Movements during dispersal.

While no detailed study of animal movements has been conducted for the study area, knowledge of the site, its habitats, and the ecology of the species potentially occurring onsite permits sufficient predictions about the types of movements occurring in the region and whether or not proposed development would constitute a significant impact to animal movements.

Lands surrounding the site have been moderately developed with neighborhoods, roads, and commercial, agricultural, and industrial land uses, which constrain, but do not completely impede, the movement of wildlife between the site and more open lands. As such, the slightly degraded creek onsite, West Little Llagas Creek, which passes through the northernmost corner of the site, likely serves as a movement corridor for local wildlife species that persist in nearby lands. However, the creek is expected to facilitate regional movements of only some wildlife species, as animals would have to travel through miles of poor habitat (i.e., urban development) before reaching the site and surrounding areas, which are themselves of relatively low habitat value.

2.3 SPECIAL STATUS PLANTS AND ANIMALS

Several species of plants and animals within the state of California have low populations and/or limited distributions. Such species may be considered “rare” and are vulnerable to extirpation as the state’s human population grows and the habitats these species occupy are converted to agricultural and urban uses. As described more fully in Section 3.2, state and federal laws have provided the California Department of Fish and Game (CDFG) and the U.S. Fish and Wildlife Service (USFWS) with a mechanism for conserving and protecting the diversity of plant and animal species native to the state. A sizable number of native plants and animals have been formally designated as “threatened” or “endangered” under state and federal endangered species legislation. Others have been designated as candidates for such listing. Still others have been designated as “species of special concern” by the CDFG. The California Native Plant Society

(CNPS) has developed its own set of lists of native plants considered rare, threatened, or endangered (CNPS 2011). Collectively, these plants and animals are referred to as “special status species.”

A number of special status plants and animals occur in the site’s vicinity (Fig. 3). These species and their potential to occur on the site are listed in Table 2 on the following pages. Sources of information for this table included *California’s Wildlife, Volumes I, II, and III* (Zeiner et. al 1988), *California Natural Diversity Data Base* (CDFG 2011), *Endangered and Threatened Wildlife and Plants* (USFWS 2011), *State and Federally Listed Endangered and Threatened Animals of California* (CDFG 2011), and *The California Native Plant Society’s Inventory of Rare and Endangered Vascular Plants of California* (CNPS 2011). This information was used to evaluate the potential for special status plant and animal species that occur on the site. Figure 3 depicts the location of special status species found by the California Natural Diversity Data Base (CNDDB). It is important to note that the CNDDB is a volunteer database; therefore, it may not contain all known or gray literature records.

A search of published accounts for all relevant special status plant and animal species was conducted for the Mount Madonna USGS 7.5” quadrangle in which the project site occurs and for the eight surrounding quadrangles (Chittenden, Watsonville East, Loma Prieta, Santa Teresa Hills, Watsonville West, Gilroy, Mount Sizer, and Morgan Hill) using the California Natural Diversity Data Base Rarefind (CDFG 2011). All species listed as occurring in these quadrangles on CNPS Lists 1A, 1B, 2, 3, or 4 were also reviewed.

Serpentine soils are absent from the site; as such, those species that are uniquely adapted to serpentine conditions, such as the big-scale balsamroot (*Balsamorhiza macrolepis* var. *macrolepis*), triburon paintbrush (*Castilleja affinis* ssp. *neglecta*), pink creamsacks (*Castilleja rubicundula* ssp. *rubicundula*), coyote ceanothus (*Ceanothus ferrisiae*), Mt. Hamilton fountain thistle (*Cirsium fontinale* var. *campylon*), San Francisco collinsia (*Collinsia multicolor*), Santa Clara Valley dudleya (*Dudleya abramsii* ssp. *setchellii*), fragrant fritillary (*Fritillaria liliacea*), Loma Prieta hoita (*Hoita strobilina*), wooly-headed lessingia (*Lessingia hololeuca*), smooth lessingia (*Lessingia micradenia* var. *glabrata*), woodland woollythreads (*Monolopia gracilens*),

Metcalf Canyon jewel-flower (*Streptanthus albidus* ssp. *albidus*), most beautiful jewel-flower (*Streptanthus albidus* ssp. *peramoenus*), and showy ranchería clover (*Trifolium amoenum*), are considered absent from the site. Other plant species occur in habitats not present in the study area (e.g., chaparral, broadleafed forest, coastal prairie, coastal scrub, etc.) or at elevations below or above onsite elevations and, therefore, are also considered absent from the site. These species include the Congdon's tarplant (*Centromadia parryi* ssp. *congdonii*), robust spineflower (*Chorizanthe robusta* var. *robusta*), sand gilia (*Gilia tenuiflora* ssp. *arenaria*), Anderson's manzanita (*Arctostaphylos andersonii*), Hooker's manzanita (*Arctostaphylos hookeri* ssp. *hookeri*), Pajaro manzanita (*Arctostaphylos pajaroensis*), Kings Mountain manzanita (*Arctostaphylos regismontana*), Santa Cruz Mountains pussypaws (*Calyptridium parryi* var. *hesseae*), Santa Clara red ribbons (*Clarkia concinna* ssp. *automixa*), sand-loving wallflower (*Erysimum ammophilum*), Kellogg's horkelia (*Horkelia cuneata* ssp. *sericea*), arcuate bush-mallow (*Malacothamnus arcuatus*), Hall's bush-mallow (*Malacothamnus hallii*), Santa Cruz Mountains beardtounge (*Penstemon rattanii* var. *kleei*), Yadon's rein orchid, (*Piperia yadonii*), Choris' popcorn-flower (*Plagiobothrys chorisianus* var. *chorisianus*), rock sanicle (*Sanicula saxatilis*), Mt. Hamilton jewel-flower (*Streptanthus callistus*), and Santa Cruz clover (*Trifolium buckwestiorum*).

LEGEND

- Special status species observation
- California Red-legged Frog Critical Habitat
- California Tiger Salamander Critical Habitat
- Bay Checkerspot Butterfly Critical Habitat

Sources:
California Dep. of Fish & Game Natural Diversity Database
U.S. Fish & Wildlife Service Critical Habitats

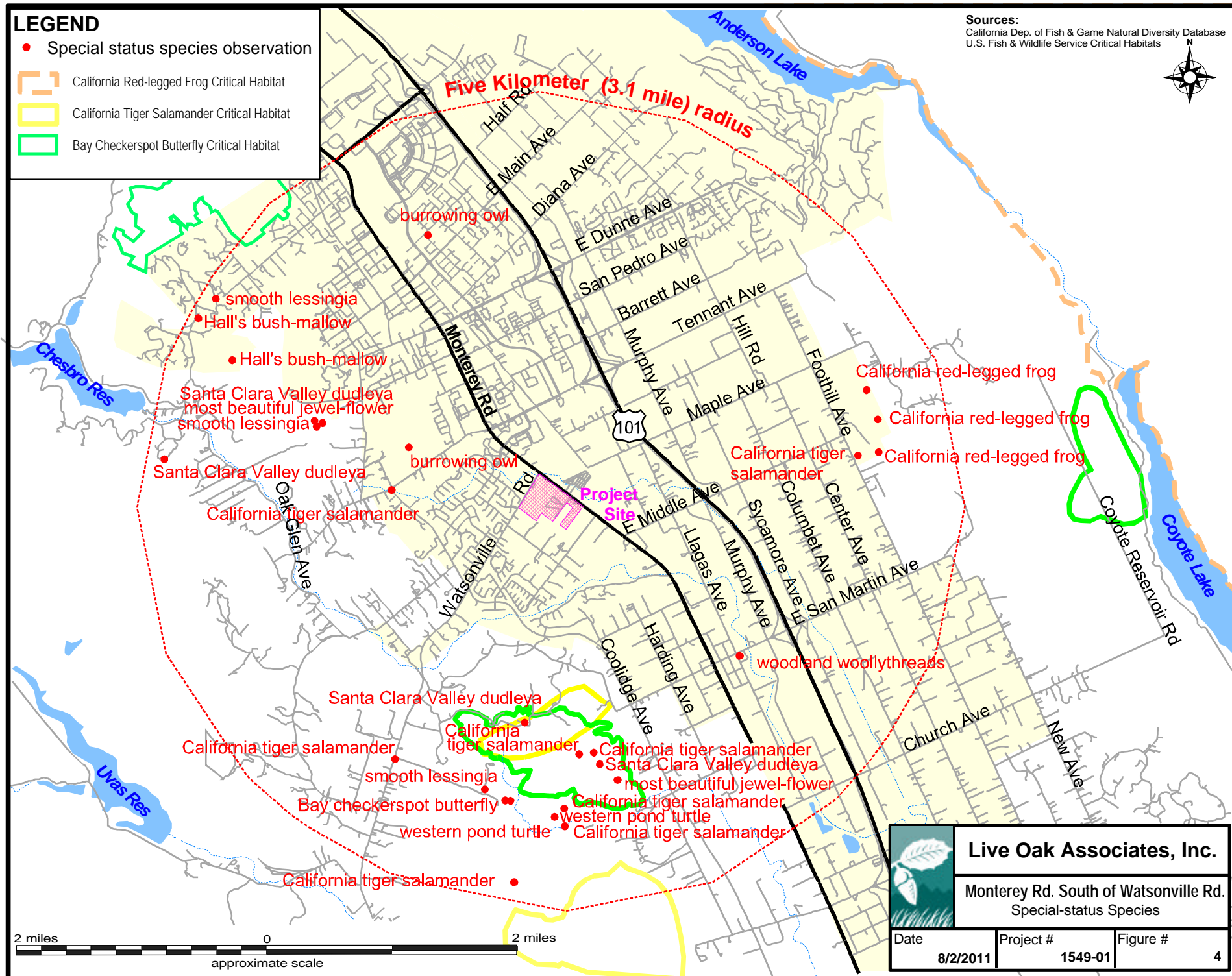


TABLE 2. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

PLANTS (adapted from CDFG 2011 and CNPS 2011)

Species Listed as Threatened or Endangered under the State and/or Federal Endangered Species Act

<i>Species</i>	<i>Status</i>	<i>Habitat</i>	<i>*Occurrence in the Study Area</i>
Monterey spineflower (<i>Chorizanthe pungens</i> var. <i>pungens</i>)	FT, CNPS 1B	<u>Habitat</u> : Occurs in sandy soils within chaparral, cismontane woodland, coastal dunes, coastal scrub and valley and foothill grassland. <u>Elevation</u> : 3-450 meters. <u>Blooms</u> : April-June.	Absent. Much of the soils of the study area have been disturbed. The Monterey spineflower is not known to occur in Santa Clara County and all of its locally recorded locations are within Monterey and Santa Cruz counties. Therefore, this species has been determined to be lacking from within the study area.
Santa Cruz tarplant (<i>Holocarpha macradenia</i>)	FT, CE, CNPS 1B	<u>Habitat</u> : Occurs in coastal prairie, coastal scrub, and valley and foothill grasslands, often in clay or sandy soils. <u>Elevation</u> : 10-220 meters. <u>Blooms</u> : June-October.	Absent. Suitable habitat does not occur on the site. Furthermore, this species is not known to occur in Santa Clara County.

Other special status plants listed by CNPS

<i>Species</i>	<i>Status</i>	<i>Habitat</i>	<i>*Occurrence in the Study Area</i>
Legenere (<i>Legenere limosa</i>)	CNPS 1B	<u>Habitat</u> : Occurs in vernal pools. <u>Elevation</u> : 1-880 meters. <u>Blooms</u> : April-June.	Absent. Marginally suitable habitat for the legenere in the form of the potential wetland swale is present within the study area for this species. However, the soils of the study area, including this feature, have been regularly disturbed. This and the fact that the nearest recorded occurrence of this species occurs to the east of Coyote Creek more than 6 miles from the study area indicates that the species is absent.
Robust monardella (<i>Monardella villosa</i> ssp. <i>globosa</i>)	CNPS 1B	<u>Habitat</u> : Broadleafed upland forest openings, chaparral, cismontane woodland, coastal scrub, and valley and foothill grasslands. <u>Elevation</u> : 100-915 meters. <u>Blooms</u> : June-August.	Absent. Much of the soils of the study area have been disturbed. And any suitable habitat that may have at one time been present for the Robust monardella has been eliminated.
Dudley's lousewort (<i>Pedicularis dudleyi</i>)	CNPS 1B	<u>Habitat</u> : Occurs in chaparral, cismontane woodland, north coast coniferous forest, and valley and foothill grassland. <u>Elevation</u> : 60-900 meters. <u>Blooms</u> : April-June.	Absent. Suitable habitat does not occur within the study area. This species is likely to have been locally extirpated as the nearest county record of this species is in Pescadero Creek from 1903.
Saline clover (<i>Trifolium depauperatum</i> var. <i>hydrophilum</i>)	CNPS 1B	<u>Habitat</u> : Marshes and swamps, valley and foothill grasslands on mesic or alkaline soils, and vernal pools. <u>Elevation</u> : 0-300 meters. <u>Blooms</u> : April-June.	Unlikely. Marginally suitable habitat in the form of the potential wetland swale is unlikely to provide for the saline clover due to the fact that strongly alkaline soils are absent from the study area and much of the soils of the study area have been disturbed. This species has not been recorded within 6 miles of the study area.

TABLE 2. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

ANIMALS (adapted from CDFG 2011 and USFWS 2011)

Species Listed as Threatened or Endangered under the State and/or Federal Endangered Species Act

Species	Status	Habitat	*Occurrence in the Study Area
Bay checkerspot butterfly (<i>Euphydryas editha bayensis</i>)	FT	Occurs in serpentine grasslands with the larval host plant <i>Plantago erecta</i> , and/or a <i>Castilleja densiflora</i> or <i>C. exserta</i> .	Absent. Serpentine soils are absent from the site, therefore, the host plants are also absent. Critical Habitat for the BCB is more than one and a half miles south of the project site.
Steelhead - Central California Coast ESU / South-Central Calif Coast ESU (<i>Oncorhynchus mykiss irideus</i>)	FT/ FT, CSC	Spawn in freshwater rivers or streams in the spring and spend the remainder of their life in the ocean.	Unlikely. Within the northwestern corner of the study area West Little Llagas Creek provides generally low quality stream habitat for fish species which may include the steelhead. The steelhead has been found within Llagas Creek, the waterway into which West Little Llagas Creek flows. The study area does not support spawning habitat for the steelhead; however, steelhead are likely to pass through the site from time to time during the wet periods of the year en route to higher quality habitat.
Santa Cruz long-toed salamander (<i>Ambystoma macrodactylum croceum</i>)	FE, CE	Endemic to the coast of Monterey Bay in southern Santa Cruz County and the northern edge of Monterey County. Occurs in dense riparian vegetation, coastal scrub, and oak woodland. Breeds in ponds. Non-breeding adults occur under moist debris.	Absent. The study area is not within the range of the Santa Cruz long-toed salamander.
California tiger salamander (<i>Ambystoma californiense</i>)	FT, CT,	Breeds in vernal pools and stock ponds of central California. Adults aestivate in grassland habitats adjacent to the breeding sites.	Unlikely. The only features of the study areas that may provide suitable habitat for CTS are the retention basins; however these basins are inundated for a maximum of 2-months during the rainy season, which is typically too short for CTS breeding. The basins are occasionally regraded, and they may contain fairly low water quality due to the fact that water is pumped into them from several locations within the facility. Otherwise, this species would have to travel significant distances over varied topography including roadways and development to locate potential aestivation habitat in the form of suitable burrows that are present onsite. Due to the regular development and soil management disturbances, aestivation habitat would be marginal at best. The nearest documented occurrence of this species is approximately one mile west of the site, near West Edmundson and Sunnyside Avenues. Critical Habitat for CTS is approximately 1.5 miles to the south of the site. Individuals from these populations would be deterred from accessing the site due to residential development and roadways between those locations and the study area. Also, individuals utilizing West Little Llagas Creek would be unlikely to successfully migrate to the study area due to the presence of predatory fish species.

TABLE 2. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

ANIMALS – cont’d.

Species Listed as Threatened or Endangered under the State and/or Federal Endangered Species Act

Species	Status	Habitat	*Occurrence in the Study Area
California red-legged frog (<i>Rana draytonii</i>)	FT, CSC	Rivers, creeks and stock ponds of the Sierra foothills and coast range, preferring pools with overhanging vegetation.	Unlikely. The site does not support perennial water, although West Little Llagas Creek runs through the northwestern corner of the site, it was shallow and drying at the time of the site visit. The other wet features onsite appear to support running water only in storm events during the wet season. Both onsite water features do not support breeding habitat for the CRLF due to the absence of deeper slow moving pools; however, this species could move through the creek from time to time. The nearest documented occurrence of the CRLF is approximately two and a half miles to the northeast. Critical Habitat for the CRLF is approximately four miles to the northeast of the site.
Western snowy plover (nesting) (<i>Charadrius alexandrinus nivosus</i>)	FT, CSC	Uses man-made agricultural wastewater ponds and reservoir margins. Breeds on barren to sparsely vegetated ground at alkaline or saline lakes, reservoirs, ponds, and riverine sand bar.	Unlikely. Breeding habitat for this species is lacking from the study area and foraging habitat is extremely marginal. This species may pass through the site en route to suitable habitats from time to time.
Least Bell’s vireo (nesting) (<i>Vireo bellii pusillus</i>)	FE, CE	Occurs in southern California during the breeding season March, migrates out of the state July through September. Dense brush, mesquite, or cottonwood-willow forests in riparian areas.	Unlikely. Foraging habitat in the form of dense brush is marginal for this species; however, the study area is outside of the known range for this species. Least Bell’s vireo (LBV) has not been recorded within 3 miles of the site. Regardless, the LBV is a volant species and may occasionally pass through the site en route to higher quality habitats.
Bank swallow (<i>Riparia riparia</i>)	CT	Occurs in open areas near flowing water, nests in steep banks along inland water or coast. State-wide.	Unlikely. Habitat in the form of large flowing water and nesting sites in the form of suitable banks are both absent from the site. Bank swallows have not been recorded within 3 miles of the site. Regardless, the bank swallow is a volant species and may occasionally forage over and/or pass through the site en route to higher quality habitats.
San Joaquin kit fox (<i>Vulpes macrotis mutica</i>)	FE, CT	Frequents annual grasslands or grassy open stages with scattered shrubby vegetation. Needs loose-textured sandy soils for burrowing and suitable prey base. Utilizes enlarged (4 to 10 inches in diameter) ground squirrel burrows as denning habitat. May forage in adjacent agricultural habitats.	Absent. Marginal denning and foraging habitat for the San Joaquin kit fox (SJKF) is present within the study area. However, the site is outside of the SJKF range, and the nearest population of this species is more than 10 miles from the site. An out-migrating individual would have to pass through miles of dangerous land uses to reach the relatively low quality habitat offered by the study area.

TABLE 2. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

ANIMALS – cont’d.

California Species of Special Concern and Protected Species

Species	Status	Habitat	*Occurrence in the Study Area
Foothill yellow-legged frog (<i>Rana boylei</i>)	CSC	Frequents partly shaded, shallow, swiftly-flowing streams and riffles with rocky substrate in a variety of habitats.	Unlikely. The site does not support perennial water, although West Little Llagas Creek runs through the northwestern corner of the site, it was shallow and drying at the time of the site visit. The other wet feature onsite appears to support running water only in storm events during the wet season. Both onsite water features do not support breeding habitat for the FYLF due to the absence of riffles and rocky substrate; however, this species could move through the creek from time to time. FYLF has not been documented within 3 miles of the site.
Western pond turtle (<i>Actinemys marmorata</i>)	CSC	An aquatic turtle of ponds, marshes, slow-moving rivers, streams and irrigation ditches with aquatic vegetation. Needs basking sites and sandy banks or grassy open fields for egg laying.	Unlikely. The site does not support perennial water, although West Little Llagas Creek runs through the northwestern corner of the site, it was shallow and drying at the time of the site visit. The other wet feature onsite appears to support running water only in storm events during the wet season; however, this species could move through the creek from time to time. The site supports poor habitat for the WPT. However, the WPT may move onto the site from nearby ponds and other water. The nearest documented occurrence of the WPT is approximately two and a half miles to the south of the site.
Coast horned lizard (<i>Phrynosoma blainvillii</i>)	CSC	Grasslands, scrublands, oak woodlands, etc. of central California. Common in sandy washes with scattered shrubs.	Absent. Suitable habitat for the CHL does not exist on the site. The CHL has not been documented within three miles of the site.
Black legless lizard (<i>Anniella pulchra nigra</i>)	CSC	This subspecies occurs only in beach dunes on the Monterey Peninsula and on the southern coast of Monterey Bay (south of the Salinas River) in Monterey County. The BLL occurs mostly underground in warm moist areas with loose soil and substrate. The BLL occurs in habitats including sparsely vegetated areas of beach dunes, chaparral, pine-oak woodlands, desert scrub, sandy washes, and stream terraces with sycamores, cottonwoods, or oaks.	Absent. The site is not within the range of the Black legless lizard.
White-tailed kite (<i>Elanus leucurus</i>)	CP	Open grasslands and agricultural areas throughout central California.	Likely. The site supports suitable foraging and nesting habitat for the WTK in the form of open grasslands and large trees.
Golden eagle (<i>Aquila chrysaetos</i>)	CP	Typically frequents rolling foothills, mountain areas, woodland areas, sage-juniper flats, and desert habitats.	Possible. The site supports marginal foraging habitat for the golden eagle in the form of open lands, however, breeding habitat is absent from the site.

TABLE 2. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

ANIMALS – cont’d.

California Species of Special Concern and Protected Species

Species	Status	Habitat	*Occurrence in the Study Area
Western burrowing owl (<i>Athene cunicularia</i>)	CSC	Open, dry grasslands, deserts and ruderal areas. Requires suitable burrows. Often associated with California ground squirrels.	Unlikely. Ground squirrel burrows that can serve as potential nests for burrowing owls occur within the study area; however, a protocol-level burrowing owl survey of the site conducted in July 2011 concluded that burrowing owls are currently absent from the site. Also, there have been no known occurrences of burrowing owls within Morgan Hill for more than 5 years. Regardless, the western burrowing owl is a volant species that may pass through the site from time to time, and may, in the future, overwinter and/or breed on the site.
Black swift (nesting) (<i>Cypseloides niger</i>)	CSC	Migrants found in many habitats of state; in Sierra nests are often associated with waterfalls.	Unlikely. Nesting habitat for this species is absent from the site, however, black swifts may migrate through the site from time to time. No documented observations are within 3 miles of the site.
California yellow warbler (<i>Dendroica petechia brewsteri</i>)	CSC	Nests in riparian thickets, especially in willows. Also frequents shrubby areas and old fields.	Unlikely. Potentially suitable breeding and foraging habitat for this species is present on the site.
Tricolored blackbird (<i>Agelaius tricolor</i>)	CSC	Breeds near fresh water, primarily emergent wetlands, with tall thickets. Forages in grassland and cropland habitats.	Unlikely. The site does not support perennial water, although West Little Llagas Creek runs through the northwestern corner of the site, it was shallow and drying at the time of the site visit. The other wet feature onsite appears to support running water only in storm events during the wet season. The TCB likely migrates through the site from time to time, although only marginal to poor breeding habitat occurs onsite.
Pallid bat (<i>Antrozous pallidus</i>)	CSC	Grasslands, chaparral, woodlands, and forests of California; most common in dry rocky open areas that provide roosting opportunities.	Possible. Marginal to poor foraging habitat in the form of the two wet features is present on the site, however, more suitable foraging habitat is likely to occur nearby. Roosting habitat in the form of buildings (houses, barns, sheds, and buildings on the mushroom farm) is present on the site.
San Francisco dusky-footed woodrat (<i>Neotoma fuscipes annectens</i>)	CSC	Hardwood forests, oak riparian and shrub habitats.	Possible. No woodrat nests were observed along West Little Llagas Creek during the July 2011 surveys, although suitable riparian habitat was present onsite. Nests of this species was reportedly observed by WRA biologists during previous studies of the site (Morgan Hill 2010) and therefore there is some chance that this species could utilize the riparian corridor for habitat in the future.

TABLE 2. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

ANIMALS – cont’d.

California Species of Special Concern and Protected Species

Species	Status	Habitat	*Occurrence in the Study Area
American badger (<i>Taxidea taxus</i>)	CSC	Found in drier open stages of most shrub, forest and herbaceous habitats with friable soils.	Unlikely. The American badger may occupy agricultural fields and hills to the west of the site and may occasionally move through the study area from these locations. Additionally, burrows of suitable size were not observed during the July 2011 surveys, and this species has not been documented within three miles of the site.
Ringtail (<i>Bassariscus astutus</i>)	CP	Rocky or talus slopes in semi-arid or riparian habitats.	Unlikely. Suitable habitat is restricted to the riparian corridor onsite, which is of marginal quality for this species.

***Explanation of Occurrence Designations and Status Codes**

Present: Species observed on the sites at time of field surveys or during recent past.

Likely: Species not observed on the site, but it may reasonably be expected to occur there on a regular basis.

Possible: Species not observed on the sites, but it could occur there from time to time.

Unlikely: Species not observed on the sites, and would not be expected to occur there except, perhaps, as a transient.

Absent: Species not observed on the sites, and precluded from occurring there because habitat requirements not met.

STATUS CODES

FE Federally Endangered
 FT Federally Threatened
 FPE Federally Endangered (Proposed)
 FC Federal Candidate

CE California Endangered
 CT California Threatened
 CR California Rare
 CP California Protected
 CSC California Species of Special Concern

CNPS California Native Plant Society Listing
 1A Plants Presumed Extinct in California
 1B Plants Rare, Threatened, or Endangered in California and elsewhere
 2 Plants Rare, Threatened, or Endangered in California, but more common elsewhere

3 Plants about which we need more information – a review list
 4 Plants of limited distribution – a watch list

2.4 JURISDICTIONAL WATERS

Jurisdictional waters include rivers, creeks, and drainages that have a defined bed and bank and which, at the very least, carry ephemeral flows. Jurisdictional waters also include lakes, ponds, reservoirs, and wetlands. Such waters may be subject to the regulatory authority of the U.S. Army Corps of Engineers (USACE), the California Department of Fish and Game (CDFG), and the California Regional Water Quality Control Board (RWQCB). See Section 3.2.4 of this report for additional information.

A formal wetland delineation and waters of the U.S. analysis has not been completed at this time. However, it is assumed the site supports jurisdictional waters. West Little Llagas Creek is a known water of the U.S. This ephemeral creek, represented as USGS blue line features, is characterized as having a defined bed and bank and flowing into Llagas Creek, which is hydrologically connected to the Monterey Bay via the Pajaro River. It is also likely that the wetland swale of the site would be considered a water of the U.S. based on the vegetation and topography observed in July 2011 and the fact that it continues offsite through a culvert, eventually emptying into an offsite reach of West Little Llagas Creek.

The remaining features may or may not be considered jurisdictional. The roadside ditch is a man-made feature that functions to collect stormwater runoff from Watsonville Road. It does not pull water from a water of the U.S. However, some hydrophytic vegetation was present within the ditch and it empties into West Little Llagas Creek. The retention basins and ditch are isolated, man-made features maintained and regularly utilized as part of the mushroom facility. Hydrophytic vegetation was not observed in the condensation ditch, but sparse hydrophytic vegetation was observed in the retention basins. The basins are occasionally regraded to amend siltation, and water in the basins is pumped in from several locations throughout the property, indicating that the water quality may at times be marginal.

Despite our preliminary analysis of the extent of agency jurisdiction, it is important to note that the USACE, CDFG, and RWQCB are the final arbiters and could claim jurisdiction over some or all of these features.

3.0 IMPACTS AND MITIGATIONS

3.1 SIGNIFICANCE CRITERIA

Approval of general plans, area plans, and specific projects is subject to the provisions of the California Environmental Quality Act (CEQA). The purpose of CEQA is to assess the impacts of proposed projects on the environment before they are carried out. CEQA is concerned with the significance of a proposed project's impacts. For example, a proposed development project may require the removal of some or all of a site's existing vegetation. Animals associated with this vegetation could be destroyed or displaced. Animals adapted to humans, roads, buildings, pets, etc., may replace those species formerly occurring on the site. Plants and animals that are state and/or federally listed as threatened or endangered may be destroyed or displaced. Sensitive habitats such as wetlands and riparian woodlands may be altered or destroyed.

Whenever possible, public agencies are required to avoid or minimize environmental impacts by implementing practical alternatives or mitigation measures. According to Section 15382 of the CEQA Guidelines, a significant effect on the environment means a "substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic interest."

Specific project impacts to biological resources may be considered "significant" if they would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;

- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Furthermore, CEQA Guidelines Section 15065(a) states that a project may trigger the requirement to make a “mandatory findings of significance” if the project has the potential to

Substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of an endangered, rare or threatened species, or eliminate important examples of the major periods of California history or prehistory.

3.2 RELEVANT GOALS, POLICIES, AND LAWS

3.2.1 Threatened and Endangered Species

State and federal “endangered species” legislation has provided the California Department of Fish and Game (CDFG) and the U.S. Fish and Wildlife Service (USFWS) with a mechanism for conserving and protecting plant and animal species of limited distribution and/or low or declining populations. Species listed as threatened or endangered under provisions of the state and federal endangered species acts, candidate species for such listing, state species of special concern, and some plants listed as endangered by the California Native Plant Society are collectively referred to as “species of special status.” Permits may be required from both the CDFG and USFWS if activities associated with a proposed project will result in the “take” of a listed species. “Take” is defined by the state of California as “to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture or kill” (California Fish and Game Code, Section 86). “Take” is more broadly defined by the federal Endangered Species Act to include “harm” (16 USC, Section 1532(19), 50 CFR, Section 17.3). Furthermore, the CDFG and the USFWS are responding agencies under the California Environmental Quality Act (CEQA). Both

agencies review CEQA documents in order to determine the adequacy of their treatment of endangered species issues and to make project-specific recommendations for their conservation.

3.2.2 Migratory Birds

State and federal laws also protect most birds. The Federal Migratory Bird Treaty Act (16 U.S.C., sec. 703, Supp. I, 1989) prohibits killing, possessing, or trading in migratory birds, except in accordance with regulations prescribed by the Secretary of the Interior. This act encompasses whole birds, parts of birds, and bird nests and eggs.

3.2.3 Birds of Prey

Birds of prey are also protected in California under provisions of the State Fish and Game Code, Section 3503.5, which states that it is “unlawful to take, possess, or destroy any birds in the order *Falconiformes* or *Strigiformes* (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.” Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered “taking” by the CDFG.

3.2.4 Bats

Section 2000 and 4150 of the California Fish and Game Code states that it is unlawful to take or possess a number of species, including bats, without a license or permit as required by Section 3007. Additionally, Title 14 of the California Code of Regulations states it is unlawful to harass, herd, or drive a number of species, including bats. To harass is defined as “an intentional act which disrupts an animal's normal behavior patterns, which includes, but is not limited to, breeding, feeding or sheltering.” For these reasons, bat colonies in particular are considered to be sensitive and therefore, disturbances that cause harm to bat colonies are unlawful.

3.2.5 Wetlands and Other Jurisdictional Waters

Natural drainage channels and adjacent wetlands may be considered “Waters of the United States” (hereafter referred to as “jurisdictional waters”) subject to the jurisdiction of the U.S.

Army Corps of Engineers (USACE). The extent of jurisdiction has been defined in the Code of Federal Regulations but has also been subject to interpretation of the federal courts.

Jurisdictional waters generally include:

- All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
- All interstate waters including interstate wetlands;
- All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce;
- All impoundments of waters otherwise defined as waters of the United States under the definition;
- Tributaries of waters identified in paragraphs (a)(1)-(4) (i.e. the bulleted items above).

As recently determined by the United States Supreme Court in *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers* (the SWANCC decision), channels and wetlands isolated from other jurisdictional waters cannot be considered jurisdictional on the basis of their use, hypothetical or observed, by migratory birds. However, the U.S Supreme Court decisions *Rapanos v. United States* and *Carabell v. U.S. Army Corps of Engineers* (referred together as the Rapanos decision) impose a "significant nexus" test for federal jurisdiction over wetlands. In June 2007, the USACE and Environmental Protection Agency (EPA) established guidelines for applying the significant nexus standard. This standard includes 1) a case-by-case analysis of the flow characteristics and functions of the tributary or wetland to determine if they significantly affect the chemical, physical, and biological integrity of downstream navigable waters and 2) consideration of hydrologic and ecologic factors (EPA and USACE 2007).

The USACE regulates the filling or grading of such waters under the authority of Section 404 of the Clean Water Act. The extent of jurisdiction within drainage channels is defined by “ordinary high water marks” on opposing channel banks. Wetlands are habitats with soils that are intermittently or permanently saturated, or inundated. The resulting anaerobic conditions select for plant species known as hydrophytes that show a high degree of fidelity to such soils. Wetlands are identified by the presence of hydrophytic vegetation, hydric soils (soils saturated intermittently or permanently saturated by water), and wetland hydrology according to

methodologies outlined in the 1987 Corps of Engineers Wetlands Delineation Manual (USACE 1987).

All activities that involve the discharge of fill into jurisdictional waters are subject to the permit requirements of the USACE (Wetland Training Institute, Inc. 1991). Such permits are typically issued on the condition that the applicant agrees to provide mitigation that result in no net loss of wetland functions or values. No permit can be issued until the Regional Water Quality Control Board (RWQCB) issues a certification (or waiver of such certification) that the proposed activity will meet state water quality standards. The filling of isolated wetlands, over which the USACE has disclaimed jurisdiction under the SWANCC decision, is regulated by the RWQCB. It is unlawful to fill isolated wetlands without filing a Notice of Intent with the RWQCB. The RWQCB is also responsible for enforcing National Pollution Discharge Elimination System (NPDES) permits, including the General Construction Activity Storm Water Permit. All projects requiring federal money must also comply with Executive Order 11990 (Protection of Wetlands).

The California Department of Fish and Game has jurisdiction over the bed and bank of natural drainages according to provisions of Section 1601 and 1602 of the California Fish and Game Code (2003). Activities that would disturb these drainages are regulated by the CDFG via a Streambed Alteration Agreement. Such an agreement typically stipulates that certain measures will be implemented which protect the habitat values of the drainage in question.

3.2.6 Local Ordinances, Policies, and Habitat Conservation Plans

Tree ordinance. The City of Morgan Hill has a tree ordinance (Chapter 12.32 of the City's municipal code) which seeks to protect all trees having a single stem or trunk with a circumference of forty inches or greater for nonindigenous species (except those in residential zones) and eighteen inches or greater for indigenous species measured at four and one-half feet vertically above the ground or immediately below the lowest branch. Indigenous trees are defined by the City as any tree that is native to the Morgan Hill region, including oaks (all types), California bays, madrones, sycamore and alder. The ordinance states that "it is unlawful for any person to cut down, remove, poison or otherwise kill or destroy, or cause to be removed any tree

or community of trees on any city or private property without first securing a permit as provided in this chapter; provided, however, that a permit shall not be required for developments which have been reviewed and approved by the planning commission or architectural and site review board and the tree removal conforms with the landscape plans of those developments.”

Santa Clara Valley HCP/NCCP.

Currently there is no adopted Habitat Conservation Plan that covers the study area. Six local partners (the County of Santa Clara, Santa Clara Valley Transportation Authority, Santa Clara Valley Water District, and the Cities of San Jose, Gilroy and Morgan Hill) and three wildlife agencies (the California Department of Fish and Game, the U.S. Fish and Wildlife Service, and the National Marine Fisheries Service) are in the process of designing a multi-species habitat conservation plan. The study area of the Santa Clara Valley Habitat Conservation Plan/Natural Communities Conservation Plan (HCP/NCCP) primarily covers southern Santa Clara County, which includes the City of San Jose with the exception of the bayland areas. The HCP/NCCP will address listed species and species that are likely to become listed during the plan's 50-year permit term. The covered species include, but are not limited to, western burrowing owl, California tiger salamander, and California red-legged frog. The (HCP/NCCP) Planning Agreement requires that the agencies comment on reportable interim projects and recommend mitigation measures or project alternatives that would help achieve the preliminary conservation objectives and not preclude important conservation planning options or connectivity between areas of high habitat value.

Several species and habitats potentially impacted by this project will be covered by the HCP/NCCP including the habitat of riparian corridors, and species including the golden eagle, western burrowing owl, and tricolored blackbird. If this HCP were approved prior to site development, the project would be subject to the provisions addressed in this HCP. This is likely to include measures included in the current draft HCP/NCCP such as a proposed 100-foot development-free setback from riparian corridor habitats.

3.3 IMPACTS AND MITIGATIONS SPECIFIC TO THE PROJECT SITE

The proposed project consists of USA expansion and a series of GPAs, annexations, rezoning, and prezonings to allow for light commercial and residential development as well as a planned senior assisted living facility within the study area. For the purposes of this analysis, it is assumed that future projects would potentially impact all portions of the study area. Due to the physically spread out nature of some of the surveyed parcels and the fact that future development within the study area is likely to be conducted in a series of separate projects, impacts and mitigations may apply to one APN and not another within the study area. Appendix C of this report contains a reference table of potential impacts by issue per APN within the study area.

3.3.1 Loss of Habitat for Special Status Plants

Potential Impacts. Forty-one special status vascular plant species are known to occur in the general project vicinity (Section 2.3; Table 2). Due to the fact that all of these species are considered to be absent or unlikely to occur, site development would have no effect on regional populations of these species since the site provides no habitat for special status plants. Therefore, state and federal laws protecting special status plants would not be relevant to development of the site.

Mitigation. Mitigation measures are not warranted.

3.3.2 Loss of Habitat for Special Status Animals

Potential Impacts. Twenty-three special status animal species occur, or once occurred, regionally (Table 2). With the exception of the white-tailed kite, golden eagle, pallid bat, and San Francisco dusky-footed woodrat, all of these species would be absent from or unlikely to occur on the site due to unsuitable habitat conditions and surrounding urban. Eventual project build-out would have no effect on these species because there is little or no likelihood that they are present.

The golden eagle would only be expected to occasionally forage over the study area and/or pass through the study area en route to higher quality habitats. Similarly, the steelhead may only be

expected to pass through the onsite reach of West Little Llagas Creek during periods of heavy inundation. Breeding and rearing habitat in the forms of gravel lined riffles and larger pools were lacking for the steelhead. The white-tailed kite, pallid bat, and San Francisco dusky-footed woodrat potentially occur more frequently as transients or residents to various portions of the study area.

The white-tailed kite and other raptors could potentially utilize the larger trees of the site for breeding habitat, especially considering that agricultural fields of the site and site vicinity provide suitable foraging area for these and other protected migratory bird species. The pallid bat may forage over various portions of the study area. Buildings of the study area provide potential roosting and/or breeding colony habitat for the pallid bat, specifically including several structures of the mushroom production facility (APN 779-04-056) and a barn located on the residential housing area of APN 779-04-030. The other species, the San Francisco dusky-footed woodrat, would be restricted to utilizing the riparian woodland habitat of West Little Llagas Creek for foraging habitat and/or nesting habitat.

Development within the study area that impacts West Little Llagas Creek and the associated riparian woodland habitat could result in the loss of a small amount of potential foraging and nesting habitat for the San Francisco dusky-footed woodrat. This would be considered a less-than-significant impact. Impacts to habitat for the white-tailed kite and pallid bat would not be considered significant, as project build-out would, at most, result in a minimal reduction of generally marginal quality foraging and/or breeding habitat available regionally for these species, and there is suitable habitat in the project vicinity that would be available to these species both during and following future site development.

Therefore, the loss of habitat for all species listed in Table 2 would be considered less-than-significant. However, impacts to individuals would be considered a potentially significant impact as discussed below (Sections 3.3.3 through 3.3.6).

Mitigation. Mitigation measures are not warranted.

3.3.3 Impacts to Tree-nesting Raptors and Other Migratory Birds

Potential Impacts. No active nests were observed on site during the July 2011 surveys but an inactive nest was observed within the riparian woodland habitat. Furthermore, large trees of throughout the parcels of the study area provide potential nesting habitat for tree-nesting raptors, including white-tailed kites. These and smaller trees and shrubs of the study area also provide potential nesting habitat for passerines and other migratory birds. Riparian woodland habitat provides potential nesting habitat for migratory birds. If any of these species were to nest on or adjacent to the site prior to or during development-related construction activities, disturbances from these activities could result in the abandonment of active nests or direct mortality to these birds. Construction activities that adversely affect the nesting success of raptors or California yellow warblers or result in mortality of individual birds constitute a violation of state and federal laws (Section 3.2.3) and would be considered a significant impact under CEQA.

Mitigation. Trees planned for removal from the study area should be removed during the non-breeding season (September 1 through January 31). If it is not possible to avoid tree removal or other disturbances during the breeding season (February 1 through August 31), a qualified biologist should conduct a pre-construction survey for nesting migratory birds, including for white-tailed kites, in all trees within the planned development footprint and within 250 feet of the footprint prior to the onset of ground disturbance, if such disturbance will occur during the breeding season. Preconstruction surveys for nesting migratory birds should be conducted no more than 14 days prior to the onset of ground disturbance during the early part of the nesting season (February 1 through May 15), and no more than 30 days prior to the onset of ground disturbance during the later portion of the nesting season (May 16 – August 31). If nesting migratory birds, including for white-tailed kites, are detected during the survey, a suitable construction-free buffer should be established around all active nests. The precise dimension of the buffer (up to 250 ft. for most raptors) would be determined at that time and may vary depending on location and species. Buffers should remain in place for the duration of the breeding season or until it has been confirmed by a qualified biologist that all chicks have fledged and are independent of their parents. Pre-construction surveys during the non-breeding season are not necessary for these species, as they are expected to abandon their roosts during

construction. Implementation of the above measures would mitigate impacts to tree-nesting raptors, including white-tailed kites, and other migratory birds to a less-than-significant level.

3.3.4 Impacts to Burrowing Owls

Potential Impacts. Protocol-level presence/absence surveys were conducted for burrowing owls in July 2011, at which time potentially suitable habitat for the owls was observed on all parcels of the study area except for APNs 779-04-001, 779-04-030, and 779-04-010, in the form of mammal burrows, but no individuals or evidence of burrowing owls in the form of feathers, white-wash, regurgitation pellets, or prey remains were observed. Therefore, burrowing owls are considered absent from the site. Nonetheless, burrowing owls are a volant species that could potentially overwinter or otherwise occupy the site in the future prior to grading. Therefore, if a burrowing owl were to occur on the site in the future prior to development, project-related activities could result in direct mortality to these birds. Construction activities that result in mortality of individual owls constitute a violation of state and federal laws (see Section 3.2.3) and would be considered a significant impact under CEQA.

Mitigation. No mitigation is warranted for loss of breeding habitat for the burrowing owl. To be prudent and to avoid potential impacts to individual burrowing owls (should they occur onsite at some time in the future before the beginning of construction), a qualified biologist should conduct pre-construction surveys for owls within 30 days of the onset of ground disturbance. These surveys would be conducted in a manner consistent with accepted burrowing owl survey protocols. If pre-construction surveys determine that burrowing owls occupy the site during the non-breeding season (September 1 through January 31), then an eviction effort (i.e., blocking burrows with one-way doors and leaving them in place for a minimum of three days) may be necessary to ensure that the owls are not harmed or injured during construction. Should burrowing owls be detected on the site during future breeding seasons (February 1 through August 31), a construction-free buffer of at least 250 feet should be established around all active owl nests. The buffer areas should be delineated with some form of fencing or visual tape, and construction equipment and workers should not enter the enclosed setback areas. Buffers should

remain in place for the duration of the breeding season or until young are independent. After the breeding season, an eviction process for any remaining owls may take place as described above.

By implementing the above mitigation, impacts to burrowing owls would be reduced to a less-than-significant level.

3.3.5 Impacts to Pallid Bat and other Non-special Status Bat Colonies.

Potential Impacts. Bats were not directly observed within the study area during the reconnaissance July 2011 surveys; however, potential colony habitat is present within the buildings of the study area, specifically including several structures of the mushroom production facility (APN 779-04-056) and a barn located on the residential housing area of APN 779-04-030. It is not known if bats currently inhabit these structures of the study area. Future development that results in the removal of structures within these parcels may result in the loss of a roosting or maternity colony of bats. The loss of a colony for any bat species, regardless of the species' listing status, would constitute a potentially significant impact under CEQA.

Mitigation. A detailed bat survey should be conducted to determine if bats are roosting or breeding in the buildings of the parcels listed above (Section 3.3.6) prior to demolition. A qualified bat specialist will look for individuals, guano, staining, and vocalization by direct observation and potentially waiting for nighttime emergence. The survey should be conducted during the time of year when bats are active, between April 1 and September 15. If demolition is planned within this timeframe, the survey should be conducted within 30 days of demolition. An initial survey could be conducted to provide early warning if bats are present, but a follow-up survey will be necessary within 30 days. If demolition is planned outside of this timeframe (September 16 through March 31), the survey should be conducted in September prior to demolition. If no bats are observed to be roosting or breeding in these structures, then no further action would be required, and demolition can proceed.

If a non-breeding bat colony is found in the structures to be demolished, the individuals should be humanely evicted via the partial dismantlement of the buildings prior to demolition under the

direction of a qualified bat specialist to ensure that no harm or “take” would occur to any bats as a result of demolition activities. If a maternity colony is detected in the buildings, then a construction-free buffer will be established around the structure and remain in place until it has been determined by a qualified bat specialist that the nursery is no longer active. Demolition should preferably be done between March 1 and April 15 or August 15 and October 15 to avoid interfering with an active nursery.

By implementing the above mitigation, impacts to bats would be reduced to a less-than-significant level.

3.3.6 Impacts to the San Francisco Dusky-footed Woodrat

Potential Impacts. No nests characteristic of the San Francisco dusky-footed woodrat were observed within the potentially suitable riparian woodland habitat of the site, located within the northern corner of the site along West Little Llagas Creek. However, according the biological studies conducted by WRA within this reach of the creek during 2010 (Morgan Hill 2010) during which time nests of the San Francisco dusky-footed woodrat were observed, the project site provides potentially suitable habitat for this species. Development related disturbances, including impacts to the riparian habitat of the study area, could result in harm to individual San Francisco dusky-footed woodrats, which would be considered a significant impact under CEQA.

Mitigation. A qualified biologist should conduct a pre-construction survey for the San Francisco dusky-footed woodrat within 30 days of ground disturbance. As this species usually breeds during the spring and summer months, and since young are altricial during early development, the nests should be manually deconstructed when it is determined by a qualified biologist that the young can move effectively independent of their parents’ care (generally from October through January). If woodrats are observed within the nest individual woodrats shall be relocated to suitable habitat in consultation with the CDFG. If young are present, a suitable construction-free buffer should be established around the active nest until such time when the young can move on their own.

By implementing the above mitigation, impacts to San Francisco dusky-footed woodrats would be reduced to a less-than-significant level.

3.3.7 Disturbance to Waters of the United States or Riparian Habitats

Potential Impacts. Future site development/redevelopment could result in permanent and temporary disturbances to onsite Waters of the United States and related riparian woodland habitat. At this time a formal wetland delineation of the study area has not been conducted. Portions of the study area (APNs 779-04-001, 779-04-056, 779-04-072, and 779-04-074) contain features that appear to be inundated at certain times through the year, including a section of West Little Llagas Creek, a wetland swale, a roadside ditch, two small condensation basins, and a drainage feature that collects condensation water along the back of one of the existing mushroom production buildings. These features are potential waters of the U.S. and waters of the State; the placement of fill within these features would constitute a significant adverse impact under CEQA.

Impacts to the riparian habitat associated with top of bank of West Little Llagas Creek would likely fall under the jurisdiction of the CDFG and would constitute a potentially significant impact under CEQA.

Mitigation. At the onset of site planning, a formal wetland delineation should be completed and submitted to the USACE for verification. After jurisdiction habitats have been identified, the project proponents should implement avoidance, minimization, and/or compensation measures to reduce impacts to any jurisdictional waters and the associated riparian woodland habitat to a less-than-significant level.

Avoidance. The preferred method of mitigation would be avoidance of all waters of the U.S. and State and riparian habitat areas by designing the project so that it avoids the placement of fill within potential jurisdictional waters and impacts to riparian habitat. A development-free riparian setback should also be observed as riparian communities require such a buffer to maintain the ecological value that they generally provide to wildlife.

Minimization. If full avoidance is not possible, actions should be taken to minimize impacts to all waters of the U.S. and State and the riparian corridor during future site development. Measures taken during construction activities should include placing construction fencing and erosion control mechanisms, if needed, around wetland features and the riparian area(s) to be preserved to ensure that construction activities do not inadvertently impact these areas.

Additionally, as part of project build-out, all proposed lighting should be designed to avoid light and glare impacts to the riparian corridor. Light sources should not be visible from riparian areas and should not illuminate riparian areas.

Compensation. Compensation measures would be required to offset temporary and permanent impacts to all waters of the U.S. and State and the riparian corridor of West Little Llagas Creek as a result of future site development that cannot avoid such impacts. These measures would either result in the creation of new habitat, either onsite or offsite, as replacement for habitat lost or enhance the quality of existing habitat. Compensation measures should include a replacement-to-loss ratio of between 1:1 and 3:1 for permanent acreage impacts (acres created for each acre impacted). This would include creation of on-site or offsite wetland and/or riparian habitat and reseedling/replanting of vegetation in temporarily disturbed areas.

Regulatory issues. The applicant should also comply with all state and federal regulations related to impacts to these habitats. This may require obtaining a Section 404 Clean Water Act permit from the USACE, Section 401 Water Quality Certification from the RWQCB, and Section 1602 Lake or Stream Alteration Agreement from the CDFG prior to initiating any construction, if deemed necessary, and fulfilling the mitigation requirements of these permits.

If the above measures are taken, impacts to waters of the U.S. and State, including impacts to West Little Llagas Creek and its riparian corridor habitat would be reduced to a less-than-significant level under CEQA.

3.3.8 Disturbance to Ordinance-Size Trees

Potential Impacts. Tree removal is likely to occur subject to future development within the study area, although it is currently unknown which trees occurring on the study area are subject to future removal. The removal of trees that are 40-inches in diameter for non-indigenous species or 18-inches in diameter for native species measured at 4.5 feet above the natural grade, or above the lowest branch would constitute a significant impact under CEQA.

Mitigation. Prior to the removal of any onsite trees, including the ornamental trees associated with the existing development, a permit would need to be secured from the City of Morgan Hill. Trees removed as a result of future development would require appropriate tree replacement mitigation (*e.g.* tree replacement at appropriate ratios depending on species and size) as determined by the City of Morgan Hill's Planning Department to reduce impacts resulting from tree removal to a less-than-significant level.

3.3.9 Loss of Habitat for Native Wildlife

Potential Impacts. Of the biotic habitats onsite, the only habitat that is sensitive and provides a modicum of ecological value to local wildlife are the wet features of the study area and the riparian woodland habitat that is associated with West Little Llagas Creek. The remainder of the study area consists of developed, ruderal vegetation, which provides only low-quality habitat for most species. Due to the small amount of low-quality habitat that would be impacted by project development, the loss of habitat for native wildlife resulting from the proposed project would constitute a less-than-significant impact.

Mitigation. Mitigation measures are not warranted.

3.3.10 Interference with the Movement of Native Wildlife

Potential Impacts. Although West Little Llagas Creek occurs within the northern corner of the study area and facilitates the movement of wildlife through the region, the project site itself provides minimal dispersal habitat for native wildlife and does not function as an important movement corridor for native wildlife. Site development is not expected to have a significant effect on home range and dispersal movements of native wildlife that may occur in the region.

Therefore, the project will result in a less-than-significant impact on the movements of native wildlife.

Mitigation. Mitigation measures are not warranted.

3.3.11 Degradation of Water Quality in Seasonal Drainages and Downstream Waters

Potential Impacts. Eventual site development can result in soils being left barren in the development footprint. Additionally, extensive grading often leaves the soils of construction zones barren of vegetation and, therefore, vulnerable to erosion. Eroded soil can be carried as sediment in seasonal creeks to be deposited in creek beds and adjacent wetlands. However, the project site is nearly level. Therefore, the potential for erosion and the degradation of water quality in West Little Llagas Creek is small.

Furthermore, the applicant is expected to comply with the provisions of a City of Morgan Hill grading permit, including standard erosion control measures that employ best management practices (BMPs). Compliance with the permit(s) should result in no impact to water quality in seasonal creeks and downstream waters from the proposed project and should not result in the deposition of pollutants and sediments in sensitive riparian and wetland habitats.

Mitigation. Mitigation measures are not warranted.

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APPENDIX A: VASCULAR PLANTS OF THE STUDY AREA

The plants species listed below were observed on the Monterey S. of Watsonville project study area during the field survey conducted by Live Oak Associates in July 2011. The U.S. Fish and Wildlife Service wetland indicator status of each plant has been shown following its common name.

OBL - Obligate
 FACW - Facultative Wetland
 FAC - Facultative
 FACU - Facultative Upland
 UPL - Upland
 +/- - Higher/lower end of category
 NI - No investigation

AGAVACEAE – Agave Family

<i>Agave americana</i> *	Century plant	UPL
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APOCYNACEAE – Dogbane Family

<i>Nerium oleander</i> *	Oleander	UPL
<i>Vinca major</i> *	Vinca, Periwinkle	UPL

ARECACEAE – Palm Family

<i>Washingtonia robusta</i> *	Washington fan palm	UPL
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ASCLEPIADACEAE - Milkweed family

<i>Asclepias fascicularis</i>	Narrow-leaf milkweed	FAC
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ASTERACEAE - Sunflower Family

<i>Anthemis cotula</i> *	Maweed, dog-fennel	FACU
<i>Baccharis pilularis</i>	Coyote brush	UPL
<i>Baccharis salicifolia</i>	Mule fat	FACW-
<i>Carduus pycnocephalus</i> *	Italian thistle	UPL
<i>Centaurea solstitialis</i> *	Yellow star thistle	UPL
<i>Cichorium intybus</i> *	Chicory	UPL
<i>Cirsium vulgare</i> *	Bull thistle	FACU
<i>Conyza canadensis</i>	Horseweed	FAC
<i>Lactuca serriola</i> *	prickly lettuce	FAC
<i>Picris echioides</i> *	Bristly ox-tounge	FAC
<i>Senecio vulgaris</i> *	Common groundsel	NI
<i>Silybum marianum</i> *	Milk thistle	UPL
<i>Sonchus asper ssp. asper</i> *	Prickly sow thistle	FAC
<i>Tragopogon sp.</i> *	Salsify	UPL
<i>Xanthium spinosum</i>	Spiny cocklebur	FAC+
<i>Xanthium strumarium</i>	Cocklebur	FAC+

BORAGINACEAE - Borage family

<i>Heliotropium curassavicum</i>	Seaside heliotrope	OBL
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BRASSICACEAE – Mustard Family

<i>Brassica nigra</i> *	Black mustard	UPL
<i>Brassica rapa</i> *	Field mustard	UPL

<i>Cardaria draba</i> *	Hoary cress	UPL
<i>Hirschfeldia incana</i> *	Summer mustard	UPL
<i>Raphanus sativus</i> *	Wild radish	UPL
CACTACEAE – Cactus Family		
<i>Opuntia</i> sp.*	Beavertail cactus	UPL
CHENOPODIACEAE – Goosefoot Family		
<i>Chenopodium</i> sp.	Lambsquarters	-
CONVOLVULACEAE - Morning-glory or bindweed family		
<i>Convolvulus arvensis</i> *	Bindweed, Morning-glory	UPL
CUCURBITACEAE - Gourd family		
<i>Cucurbita</i> sp.	Squash (garden)	UPL
CYPERACEAE - Sedge family		
<i>Carex</i> sp.	Sedge	-
<i>Cyperus eragrostis</i>	Tall cyperus	FACW
<i>Eleocharis</i> sp.	Sedge	-
DIPSACACEAE – Teasel Family		
<i>Dipsacus fullonum</i> *	Fuller's teasel	NI
FABACEAE – Legume Family		
<i>Albizia julibrissin</i> *	Silktree	UPL
<i>Medicago polymorpha</i> *	Burclover	UPL
FAGACEAE - Oak family		
<i>Quercus agrifolia</i>	Coast live oak	UPL
<i>Quercus lobata</i>	Valley oak	FAC
GERANIACEAE – Geranium Family		
<i>Erodium cicutarium</i> *	Redstem filaree	UPL
JUGLANDACEAE - Walnut family		
<i>Juglans californica</i>	California black walnut	FAC
LAMIACEAE - Mint family		
<i>Trichostema lanceolatum</i>	Vinegar weed	UPL
LILIACEAE - Lily family		
<i>Agapanthus</i> sp.	African lily	UPL
LYTHRACEAE – Loosestrife Family		
<i>Lagerstroemia indica</i>	Crape myrtle	UPL
MALVACEAE – Mallow Family		
<i>Malva neglecta</i> *	Dwarf mallow	UPL
MYRTACEAE – Myrtle Family		
<i>Callistemon</i> sp.*	Bottlebrush	UPL
<i>Eucalyptus globulus</i> *	Blue gum	UPL
OLEACEAE – Olive Family		
<i>Olea europaea</i> *	Olive	UPL
ONAGRACEAE – Evening Primrose Family		
<i>Epilobium brachycarpum</i>	Panicled willowherb	UPL
PINACEAE – Pine Family		
<i>Pinus radiata</i>	Monterey pine	UPL
PLANTAGINACEAE - Plantain family		
<i>Plantago lanceolata</i> *	English plantain	FAC-

PLATANACEAE – Sycamore Family*Platanus* sp.

Planetree -

POACEAE - Grass Family*Avena barbata**

Slender wild oat UPL

*Bromus diandrus**

Ripgut brome UPL

Hordeum marinum ssp. *gussoneanum**

Mediterranean barley FAC

Hordeum murinum

Foxtail barley NI

Lolium sp.*

Ryegrass UPL

*Phalaris aquatica**

Harding grass FAC+

*Poa annua**

Annual bluegrass FAC-

*Polypogon monspeliensis**

Rabbitsfoot grass FAC+

*Sorghum halepense**

Johnsongrass FACU

POLYGONACEAE – Buckwheat Family*Polygonum arenastrum**

Common knotweed UPL

*Rumex crispus**

Curly dock FACW-

ROSACEAE – Rose Family*Prunus* sp.

Plum -

SALICACEAE – Willow Family*Salix laevigata*

Red willow -

STRELIZIACEAE – Nightshade Family*Strelitzia reginae**

Bird of Paradise -

TAXODIACEAE – Bald Cypress Family*Sequoia sempervirens*

Coast redwood UPL

TYPHACEAE – Cattail Family*Typha latifolia*

Broadleaf cattail OBL

ZYGOPHYLLACEAE - Caltrop Family*Tribulus terrestris**

Puncture vine UPL

*Introduced, non-native species

APPENDIX B: SUMMARY TABLE OF POTENTIALLY SIGNIFICANT BIOLOGICAL IMPACTS PER PARCEL FOR THE MONTEREY S. OF WATSONVILLE PROJECT

The following table defines the potentially significant biological impacts and/or issues requiring specific predevelopment surveys for the study area per parcel as determined by LOA biologists during the July 2011 surveys. Abbreviations within the table are as follows: BUOW = burrowing owls; SFDW = San Francisco Dusky-footed Woodrat.

APN	Wetlands	Nesting Migratory Birds	BUOW	Bats	SFDW	Trees
779-04-001	X	X			X	X
779-04-003		X	X			X
779-04-004		X	X			
779-04-005		X	X			X
779-04-010		X				X
779-04-030		X		X		X
779-04-052		X	X			
779-04-056	X	X	X	X	X	X
779-04-072	X	X	X			X
779-04-074	X	X	X			X